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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,553

08/18/2003

Hsueh Yin Lee

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WEI TE CHUNG  
FOXCONN INTERNATIONAL, INC.  
1650 MEMOREX DRIVE  
SANTA CLARA, CA 95050

EXAMINER

HALE, ADAM G

ART UNIT

PAPER NUMBER

3609

MAIL DATE

DELIVERY MODE

08/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/643,553

Applicant(s)

LEE ET AL.

Examiner

Adam G. Hale

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/18/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. Specifically, the last line of the abstract references "said modification."  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Chase, Jr. US 5,974,238 (hereinafter referred to as "Chase").

5. **With respects to claims 1 and 12**, Chases teaches a system for Automatic Data Synchronization Between a Handheld and a Host Computer Using Pseudo Cache Including Tags and Logical Data Elements:

a mobile computing device wherein an application server comprises a cache manager and a replication manager; interpreted to be the disclosure of the host computer (i.e. application server and database server) containing a data synchronization manager and the utilization by the host computer of the symmetric multiprocessor system model (SMP) to handle cache (Chase col. 3 lines 31 – 37 and col. 12 lines 15 – 23 and 34 – 37)

the cache manager is used to receive and store information sent by the mobile terminals and the database server; interpreted to be the mimicking of the SMP behavior, which utilizes caches to achieve data coherency (Chase col. 12 lines 20 – 29 and 34 – 37)

the replication manager comprises a first data filter module, which is used to filter information added in the database server, and to modify existing information added in the database server, and to modify existing information in the database server and the mobile terminals (Chase col. 3 lines 34 – 45); and

each of the mobile terminals comprises an information searching module, the information searching module further comprises a vehicle orders daily

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searching sub-module and a distributor orders daily searching sub-module for searching vehicle orders daily information and distributor orders daily information respectively; Chase is interpreted to provide the means to accomplish these tasks by the disclosure of that the handheld computer may contain various software programs, including ones such as calculators, spreadsheets and expense account software (Chase col. 9 lines 39 – 56)

the database server is used for storing information on clients, vehicles and distributor orders; interpreted to be the disclosure that the handheld computer is capable of file and data storage, and further capable of storing a program and related data for a phone number or contact directory program (Chase col. 9 lines 34 – 36 and 22 – 26)

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
9. Claims 1 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auto/Mate Dealership Systems website (accessed through archive.org with effective publication dates of 12/3/1998 (pg. 1) and 12/6/1998 (pg. 2)(hereinafter referred to as “Automate”) in view of Chase.
10. **With respect to claims 1 and 12,** Automate discloses a system for:  
vehicle orders daily searching sub-module accessible through a CRT terminal by providing listings of vehicle inventory that show the respective status for a vehicle to include “available ... or sold” (Automate pg. 1 lines 1-2, 12 and 17). This is interpreted to disclose a vehicle orders daily searching sub-module. Automate discloses a distributor orders daily information searching sub-module through a CRT terminal by providing listings of vehicle inventory that show the respective status for a vehicle to include “on-order” (Automate pg. 1 lines 1-2, 12 and 17). The status of “on-order” is interpreted to reflect the status of a vehicle as being “on-order” from a distributor.

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Automate inherently discloses a database servers used for storing information on vehicles and distributor orders as one must exist to store the information regarding vehicle inventory and "on-order" vehicles, information that is accessible through CRT terminals (Automate page 1 lines 1 –2). Automate discloses a database server used for storing information on clients, vehicle and distributor orders by way of the disclosure of the ability of a service advisor to instantly display customer information on a terminal (Automate page 2 lines 2 – 5) and providing up-to-date vehicle inventory listings showing status as available, on-order, or sold (Automate page 1 lines 14 – 16).

Chase teaches a system for Automatic Data Synchronization Between a Handheld and a Host Computer Using Pseudo Cache Including Tags and Logical Data Elements:

a mobile computing device wherein an application server comprises a cache manager and a replication manager; interpreted to be the disclosure of the host computer (i.e. application server and database server) containing a data synchronization manager and the utilization by the host computer of the symmetric multiprocessor system model (SMP) to handle cache (Chase col. 3 lines 31 – 37 and col. 12 lines 15 – 23 and 34 – 37);

the cache manager is used to receive and store information sent by the mobile terminals and the database server, interpreted to be the mimicking of the SMP behavior which utilizes caches to achieve data coherency (Chase col. 12 lines 20 –29 and 34 – 37);

the replication manager comprises a first data filter module, which is used to filter information added in the database server, and to modify existing information added in the database server, and to modify existing information in the database server and the mobile terminals (Chase col. 3 lines 34 – 45); and

the database server is used for storing information on clients, vehicles and distributor orders; interpreted to be the disclosure that the handheld computer is capable of file and data storage, and further capable of storing a program and related data for a phone number or contact directory program (Chase col. 9 lines 34 – 36 and 22 – 26)

However, Chase does not teach that his data synchronization is used in a vehicle dealership setting where the mobile terminals comprise an information searching module, the information searching module further comprising a vehicle orders daily searching sub-module and distributor orders daily searching sub-module for searching vehicle orders daily information and distributor orders daily information. Chase also does not teach a database server used for storing information on vehicles and distributor orders.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the mobile terminals and associated methods of Chase with the vehicle inventory searching and database disclosures of Automate in order to provide a more efficient system for searching and generating various vehicle inventory queries. A person having ordinary in the art at the time the invention was made would have also recognized that it would be obvious to take the functions of



Automate that were performed on a substantially stationary CRT terminal and make them available on a portable handheld or mobile terminal, as Chases teaches that as the use of personal computers increased, so did the desire to use computers remotely to support and increase the efficiency of a mobile user (Chase col. 1 lines 30 – 31).

11. **With respect to claim 2**, Chase discloses a system for mobile terminals to comprise a data storage for storing information downloaded from the application server and input from the mobile terminals, interpreted to be the disclosure that data is stored on the handheld computer, the data being a common shared set between the host computer and the handheld computer (Chase col. 3 lines 27 – 31).

12. **With respect to claim 3**, Chases a system for mobile terminals to further comprise a link switching module for switching states as between the mobile terminal and the application server and the states of connection comprising a connected and disconnected state, by way of teaching the incorporation of Infrared Data Association (IRDA) standard that allows machines to initiate connections, transfer data, and to cleanly disconnect (Chase col. 6 lines 31 – 38).

13. **With respect to claim 4**, Chase discloses a system wherein each of the mobile terminals further comprise a data synchronization module for downloading information for synchronization from the application server, and for storing the downloaded information in the data storage, interpreted to be the teaching of a data synchronization engine and an apparatus for performing dynamic synchronization between data stored in a handheld computer and a host computer, each having a shared copy of the common data set (Chase col. 3 lines 27 – 31).

14. **With respect to claim 5**, Chases discloses a system wherein each of the mobile terminals further comprises a second data filter module for filtering modification of data stored in the data storage, said modification performed when the mobile terminal is in the disconnected state, and for sending data thus modified to the data synchronization module; interpreted to be the user initiated actions of modifying, creating and deleting data that act as cues in the dynamic synchronization process (Chase col. 15 lines 21 – 24).

15. **With respect to claim 6**, Chase discloses a system wherein mobile terminals are personal digital assistants, laptop computers or smart phones, by disclosing a handheld computer, a term will recognized in the art to include a personal digital assistant (Chase col. 3 lines 28 – 30).

16. **With respect to claim 7**, Chase discloses a system wherein each of the mobile terminals comprises an account setting module for setting dial-up accounts for connections in regions which a user of the mobile terminal routinely visits, interpreted to be the disclosure of the host and handheld computers synchronization through a wire line interface (Chase col. 22 lines 64 – 77 and col. 23 line 1).

17. **With respect to claim 8**, Chases discloses a system wherein the application server further comprises a domain manager for managing domains; interpreted to be the system where an address can be used to construct a unique identifier that links a data record entry, such as an appointment, phone number or action item, to a corresponding data record on the handheld computer (Chase col. 12 lines 51 – 65).

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18. **With respect to claim 9**, Automate teaches a method of a user to set one or more search parameters (interpreted to be the query of whether there are any corvettes available, Pg. 1 lines 5 – 6), sending the search message (interpreted to be the entering into the entering of the search parameters into the online inquiry interface, Pg. 1 lines 3 –4), and generating and displaying the search results (interpreted to be the displaying of listing status, i.e. whether or not a vehicle is available, Pg. 1 lines 5 – 6 and 16).

Chase discloses a method for:

connecting the mobile terminal with an application server, interpreted to be the incorporation of Infrared Data Association (IRDA) standard that allows machines to initiate connections, transfer data, and to cleanly disconnect (Chase col. 6 lines 31 – 38)

generating a synchronization request according to a detailed demand input by a user, and sending the synchronization request to the application server, interpreted to be the user-initiated actions to modify, create or delete data that serve as cues in the data synchronization process and the subsequent transactions initiated by the handheld computer to maintain coherency with the desktop computer (Chase col. 15 lines 20 –28) and then result in data being sent to the desktop (See e.g. Chase col. 16 lines 59 – 61)

obtaining information needed to meet the synchronization request, interpreted to be the acknowledgment signal from the desktop computer (Chase col. 16 lines 62 – 63)

Chase does not teach setting one or more search parameters, generating a search message, sending the searching message, and generating and displaying the search results.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the mobile terminals and associated methods of Chase with the vehicle inventory searching and database disclosures of Automate in order to provide a more efficient system for searching and generating various vehicle inventory queries. A person having ordinary in the art at the time the invention was made would have also recognized that it would be obvious to take the functions of Automate that were performed on a substantially stationary CRT terminal and make them available on a portable handheld or mobile terminal as Chases teaches that as the use of personal computers increased, so did the desire to use computers remotely to support and increase the efficiency of a mobile user (Chase col. 1 lines 30 – 31).

19. **With respect to claim 10**, Chase does not disclose a method wherein said information comprises information on any one or more of clients, vehicles and distributor orders. Automate inherently discloses a database servers used for storing information on vehicles and distributor orders as one must exist to store the information regarding vehicle inventory and “on-order” vehicles, information that is accessible through CRT terminals (Automate page 1 lines 1 –2). Automate discloses a database server used for storing information on clients by way of the disclosure of the ability of a service advisor to instantly display customer information on a terminal (Automate page 2 lines 2 – 5) )

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and providing up-to-date vehicle inventory listings showing status as available, on-order, or sold (Automate page 1 lines 14 – 16).

20. **With respect to claim 11**, Chases discloses a method for querying repots using a mobile terminals to further comprise the step of cutting off the connection between the mobile terminal and the application server, by way of teaching the incorporation of Infrared Data Association (IRDA) standard that allows machines to initiate connections, transfer data, and to cleanly disconnect (Chase col. 6 lines 31 – 38).

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clark et al. US 2001/0011308 A1 discloses the synchronization of a handheld computer with a host computer. Lunsford et al. US 6,901,434 discloses the synchronization of data between two handheld computers. Hawkins et al. US 6,728,786 discloses a method and apparatus for synchronizing a portable computer system with a desktop computer system.

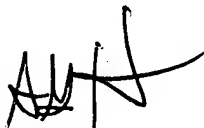
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**Conclusion**

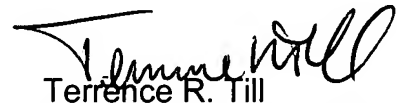
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam G. Hale whose telephone number is 571-270-3509. The examiner can normally be reached on Monday through Thursday 7:30 - 6:00 Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrence Till can be reached on 571-272-1280. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



AGH  
8/28/2007



Terrence R. Till  
Supervisory Patent Examiner